

ABSTRACT

The invention relates to a process for making a multi-filament polyethylene yarn via a gel-spinning process, wherein a spin finish is applied at least
5 once in an amount of 0,1-10 mass% based on the filament, to a filament that contains less than 50 mass% of solvent; the spin finish comprising at least 95 mass% of at least one volatile compound having a boiling point at 0,1 MPa pressure of from 30 to 250°C; and the spin finish is subsequently removed by exposing the filament to a temperature of below the melting temperature of the filament. With this process a yarn is made that
10 has a very low amount of residues on the surface of the fibres, without the need for a washing or extraction step, showing good mechanical properties, and very suited for e.g. biomedical applications.

The invention further relates to a process for converting polyolefin fibres into a semi-finished or end-use product. The invention also concerns a
15 polyethylene yarn and a semi-finished or end-use product obtainable by said processes, as well as to the use of thereof in biomedical applications.